

Pennsylvania DEP Cambria Office Building

Ebensburg, Pennsylvania



Version 2.0
GOLD



Owner: MBC Properties

Project Team:

Architect:	Kulp Boecker Architects
Engineer:	WJP Engineers
Contractor:	Miller Bros. Construction, Inc.
Consultant:	Climate, Comfort, Heating and Air Conditioning, Inc. Crystal Mitchell Excavating Phoenix GeoThermal Services

Building Statistics:

Completion Date:	September 2000
Cost:	\$90/square foot
Size:	34,500 gross square feet
Footprint:	2.02 acres including paved areas
Construction Type:	Commercial
Use Group:	Office
Lot Size:	8.32 acres
Annual Energy Use:	850.6 MBtu/year
Occupancy:	128 Staff

Sustainable Sites

- **Alternative Transportation:** natural gas refueling stations are provided for 7% of parking capacity; three bus lines within ¼ mile; bicycle racks and showering facilities
- **Reduced Site Disturbance:** 75% of the site was retained as open space
- **Stormwater Management:** No wetlands are impacted; new wetlands created; portion of paving is pervious; no net increase of stormwater run-off
- **Reduced Heat Islands:** 80% of roof surfacing is Energy Star compliant

Water Efficiency

- **Water Efficient Landscaping:** Native plants and trees require no irrigation
- **Water Use Reduction:** Water consumption reduced by 32.6%

Energy and Atmosphere

- **Optimize Energy Performance:** Energy cost is 66% lower than base building cost using 0.65 watt per ft² lighting, motion sensors, passive design, daylighting, minimal exterior lighting, insulated concrete forms, additional roof insulation, triple-glazed windows, raised flooring, ground source heat pumps and passive energy recovery
- **Renewable Energy:** 14.3 kW photovoltaic system installed on roof and two trackers results in 32% savings of total building energy costs
- **Green Power:** Purchasing at least 2 years of Green-e certified renewable grid power

Materials and Resources

- **Resource Reuse:** 5% salvaged materials use (by cost)
- **Recycled Content:** 74% of materials, measured by USGBC's weighted cost value, contain at least 20% post-consumer and/or 40% post industrial recycled content in aggregate
- **Local/Regional Materials:** 25.6% of materials (by cost) are manufactured within 500 miles
- **Rapidly Renewable Materials:** 7.35% of materials (by cost) are comprised of rapidly renewable materials including composite wood TJI joists and trusses, agrifiber hardboard

Indoor Environmental Quality

- **Cabon Dioxide Monitoring:** sensors installed
- **Construction IAQ Management Plan:** HVAC system and underfloor supply air plenum were protected during construction and thoroughly cleaned afterwards
- **Low-Emitting Materials:** All adhesives, sealants, paints, carpet and composite wood emit low or no volatile organic compounds
- **Indoor Chemical & Pollutant Source Control:** Permanent walk-off mats, deck-to-deck separations, independent ducted exhaust system around chemical use areas, separate laundry sinks, fume hood, and use of only benign chemicals for operation and maintenance
- **Controllability of Systems:** 43 operable windows, task lighting and motions sensors installed
- **Daylight & Views:** 88% of occupied spaces achieve a 2% or greater daylight factor; 100% of space has access to exterior view